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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,216	06/16/2006	Harald Fink	03-H36US	7714
7590 Michael M Rickin ABB Legal Dept 4U6 29801 Euclid Avenue Wickliffe, OH 44092-1832			EXAMINER FISHMAN, MARINA	
			ART UNIT 2833	PAPER NUMBER
			MAIL DATE 11/09/2011	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/583,216

**Applicant(s)**

FINK ET AL.

**Examiner**

MARINA FISHMAN

**Art Unit**

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 5) ☒ Claim(s) 8-11 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 8-11 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 06 January 2010 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-SB03)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

1. In view of the Appeal Brief filed on 08/22/2011, PROSECUTION IS HEREBY REOPENED. A revised rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing at the end of this action.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8 - 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant should clarify the structure of “an interior portion of the bushing is disposed inside the enclosure” recited in Claim 8. The interior of the bushing would enclose the vacuum switching chamber, as shown in figures 2, therefore for the purpose of examination the Examiner considers **lower portion** of the bushing located below plate 5 as the interior portion.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nonken [US 3,812,314] in view of Renz et al. [6,720,515].

Nonken [Figure 3] discloses a medium-voltage switchgear assembly comprising: an enclosure [16, Figure 3] filled with an insulating gas [column 7, lines 45 - 51]; and a bushing [1, including 1a' and 1b'] extending through the enclosure such that an interior portion (the lower end) of the bushing is disposed inside the enclosure [16] with the insulating gas and an exterior portion 1b' of the bushing is disposed outside the enclosure, the bushing comprising a vacuum switching chamber [5' 1a', column 7, line 55 - 58], a conductive edge board connected to and extending radially outward from the switching chamber, the edge board being connected to a wall of the enclosure and having a seal that engages an outer surface of the wall to form a gas tight seal [2', 2b', column 7, lines 43 – 47] therewith.

Nonken discloses the instant claimed invention except for a bushing comprising a three position switching chamber, and the connection of the edge board to the wall forming a ground point for the switching chamber. Renz et al. disclose a switchgear with a three position switch and having a conductive edge board [15] connected to and extending radially outward from the switching chamber the wall forming a ground point for the switching chamber. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a bushing comprising a three position switching chamber, and a conductive edge board forming a ground point in Nonken, as suggested by Renz et al. in order to have a ground switch formed within the vacuum chamber.

Regarding Claim 9, Nonken discloses the switchgear assembly, wherein the bushing has a cast-resin body [1a', column 2, lines 65 and 66] that encapsulates the switching chamber. Regarding Claim 10, Nonken and Renz et al. disclose the switchgear assembly, wherein the switching chamber comprises a three-position switch [Renz] enclosed in a vacuum insulated housing having a metal center portion [14, Renz Figure 1] disposed between ceramic end portions [10, 11], the center portion being connected to the edge board. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a metal center portion in Nonken, as suggested by Renz, so that edge board can be connected to the metal center portion from proper seal. Regarding Claim 11, Nonken discloses the switchgear assembly, wherein the switch comprises a moving contact [9] and a fixed contact [8], the fixed contact being disposed in the interior portion of the bushing.

***Response to Arguments***

6. Applicant's arguments filed 08/22/2011 have been fully considered but they are not persuasive.

Appellant has argued that the Examiner has failed to establish a prima facie case of obviousness in rejecting independent claim 8 and dependent claims 9-11 over Nonken in view of Renz et al. because the Examiner has not provided a rational underpinning to support a legal conclusion of obviousness. The Appellant has further argued (a) the vacuum switch 4 [of Nonken] is not a three position switch, as it does not have a grounding position; (b) there is nothing in Nonken that shows or describes a gas anywhere in the bushing 1 of Fig. 1.

The Examiner respectfully disagrees. The Office action follows all the required steps for a combination of references to make a prima facie case of obviousness under 35 USC 103. The Examiner wishes to point out that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in anyone or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case Renz has been used for a teaching of a conductive edge board connected to and extending radially outward from the switching chamber, the edge board being connected to a wall of the enclosure and having a seal that engages an outer surface of the wall to form a gas tight seal therewith, the connection of the edge board to the

wall forming a ground point for the switching chamber. Thus the combination would result in a three position switch, which is enhancement of original Nonken patent and thus satisfies each and every limitation of the claim. As to the remark that there is no mention of gas in Nonken Patent. The Examiner respectfully disagrees. The Appellant in the remarks, page 7, line 7, does admit that the reference discloses a gas tank 16. Also see column 7, lines 45-51. As to the remark about Claim 8, that claim requires "an enclosure filled with insulating gas" and Nonken does satisfy this limitation.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARINA FISHMAN whose telephone number is (571)272-1991. The examiner can normally be reached on 5:30 - 4:00 M-T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Renee S. Luebke can be reached on 571-272-2009. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marina Fishman/  
Examiner, Art Unit 2833  
November 3, 2011

*/renee s luebke/*  
Renee Luebke  
Supervisory Patent Examiner  
AU 2833